

## CLAIMS

### WHAT IS CLAIMED IS:

1. A programmable telephone system comprising:  
a guestroom telephone;  
the guestroom telephone including  
at least one speed-dial key;  
memory corresponding to the at least one speed key for storing data  
corresponding to speed-dial telephone numbers;  
a controller;  
a call recognition circuit;  
a computer remotely located from the guestroom telephone;  
the computer configured to automatically place a call to the guestroom telephone  
and establish communication therewith;  
said communication being established when the call recognition circuit  
determines that the call has not been answered based on a predetermined criterion; and  
the computer configured to transmit speed-dial data to the guestroom telephone  
during said communication, wherein the controller programs the guestroom telephone with the  
data corresponding to the received speed-dial data.
2. The system of claim 1 wherein the guestroom telephone is configured to operate  
in at least one of a programming mode and a standard mode.
3. The system of claim 1 wherein after the guestroom telephone receives the speed-  
dial data, the controller transmits an indication to the computer so that the computer terminates  
the call.
4. The system of claim 3 wherein after the controller transmits the indication to the  
computer, the guestroom telephone switches from a programming mode to a standard mode.
5. The system of claim 1 wherein after the communication is established, the  
guestroom telephone switches from a standard mode to a programming mode.
6. The system of claim 1 wherein programming of the guestroom telephone by the  
computer eliminates manual entry of the speed-dial data into the guestroom telephone.

7. The system of claim 1 wherein the guestroom telephone operates in a standard mode if the call is answered within a predetermined period of time or within a predetermined number of rings.

8. The system of claim 1 wherein the guestroom telephone operates in a programming mode if the call is not answered within a predetermined period of time or not answered within a predetermined number of rings.

9. The system of claim 1 wherein the predetermined criteria is at least one of a) the call from the computer has not been answered within a predetermined number of rings, b) the call from the computer has not been pending for a predetermined period of time

10. The system of claim 1 wherein the call recognition circuit causes the communication to be established if the call from the computer has not been answered within a predetermined number of rings.

11. The system of claim 1 wherein the call recognition circuit prevents establishment of the communication if the call from the computer has not been pending for a predetermined number of rings.

12. The system of claim 1 wherein the call recognition circuit prevents establishment of the communication if the call from the computer has not been pending for a predetermined period of time.

13. The system of claim 1 wherein the call recognition circuit is a ring sensing circuit.

14. The system of claim 1 wherein the call recognition circuit is a timing circuit.

15. The system of claim 1 wherein the call recognition circuit is a caller identification circuit wherein said communication is established if the telephone number identified by the caller identification circuit matches one of a predetermined telephone number.

16. The system of claim 1 further including a first modem operatively coupled to the controller and a second modem operatively coupled to the computer, the first modem and the second modem configured to facilitate communication between the computer and the guestroom telephone.

17. The system of claim 16 wherein the first modem is an internal modem disposed within the guestroom telephone.

18. The system of claim 16 wherein the call is connected to the first modem when the call recognition circuit determines that the call has not been answered for a predetermined amount of time.

19. The system of claim 1 further including two guestroom telephones wherein the computer calls the first guestroom telephone and causes the first guestroom telephone to be programmed with the speed-dial data and then calls the second guestroom telephone and causes the second guestroom telephone to be programmed with the speed-dial data.

20. The system of claim 19 wherein the speed-dial data transmitted to the first guestroom telephone is different than the speed-dial data transmitted to the second guestroom telephone.

21. The system of claim 1 further including a plurality of guestroom telephones wherein the computer calls each guestroom telephone based upon a telephone number corresponding to each said guestroom telephone, the telephone numbers stored in a memory of the computer.

22. The system of claim 21 wherein the telephone numbers are stored in a computer file accessible by the computer.

23. The system of claim 21 wherein the telephone numbers are stored in a database accessible by the computer.

24. The system of claim 1 wherein the controller is selected from the group consisting of a microprocessor, computer, CPU (central processing unit), RISC processor, single-chip computer, distributed processor, server, micro-controller, controller, discrete logic computer and remote computer.

25. A remotely programmable hotel telephone system comprising:  
a hotel telephone;  
the hotel telephone including  
a handset and a plurality of speed-dial keys;  
a plurality of memory locations operatively associated with the speed-dial keys to store speed-dialing data corresponding to predetermined telephone numbers;  
a controller;  
a call recognition circuit operatively coupled to the controller;

a first modem operatively coupled to the controller;  
a computer remotely located from the hotel telephone;  
a second modem operatively coupled to the computer, the first modem and the second modem configured to facilitate communication between the computer and the hotel telephone;  
the computer configured to automatically call the hotel telephone and establish communication with the hotel telephone;  
said communication being established when the call recognition circuit detects that the call from the computer has not been answered for a predetermined amount of time;  
the computer configured to transmit speed-dial data to the hotel telephone during said communication; and  
the controller causing the received speed-dial data to be stored in the memory locations so that the hotel telephone is programmed with new or additional speed-dial data corresponding to the plurality of speed-dial keys.

26. A programmable telephone system comprising:
- providing a guestroom telephone;
  - providing a computer remotely located from the guestroom telephone;
  - automatically placing a call by the computer to the guestroom telephone to establish communication between the computer and the guestroom telephone;
  - determining by the guestroom telephone when the call has not been answered for a predetermined amount of time;
  - after the determination that the call has not been answered for the predetermined amount of time, establishing communication between the guestroom telephone and the computer, and the guestroom telephone entering into a programming mode;
  - transmitting by the computer speed-dial data to the guestroom telephone during said communication, wherein the guestroom telephone is programmed with data corresponding to the received speed-dial data; and
  - terminating said communication between the computer and the guestroom telephone after the guestroom telephone is programmed with the data.